

Buzzards Bay Embayment Health Baywatchers: The Coalition for Buzzards Bay Citizen's Water Quality Monitoring Program

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Biographical Sketch of Author

Tony Williams is the water monitoring coordinator for The Coalition for Buzzards Bay Citizen's Water Quality Monitoring Program, or Baywatchers. Since 1996, he has organized and trained 100+ volunteers each summer as the program is moving into its 13th year of monitoring 30 Harbors and Coves of Buzzards Bay. He has expanded the monitoring design, quality assurance plan, and sampling methods, and continues to coordinate all sample collection activities for the Coalition. Tony moved to Cape Cod and joined the Coalition after working a number years on different ground water projects, coastal marine habitat research and with public environmental education programs. He has worked for the Northern Virginia Park Authority, Mevers and Associates- Environmental Consultants, Pennsylvania Department of Agriculture and Penn State University, and with the Florida Department of Natural Resources Marine Research Institution. Together with technical support from the Coastal Systems Group at the UMass Dartmouth School for Marine Science and Technology, he has maintained one of the largest coastal monitoring programs in the Commonwealth of Massachusetts.

Abstract

Baywatchers: The Coalition for Buzzards Bay Citizen's Water Quality Monitoring Program was initiated in 1992 to document and evaluate nitrogen-related water quality and long-term ecological trends in Buzzards Bay. The research objective is to better understand the Bay ecosystem and its response to human-related impacts in order to guide restoration and protection. **What's at Stake:** Although much of the Bay ecosystem remains relatively healthy, major changes in land use and nutrient loading from the surrounding watershed are resulting in significant changes in habitat health along the Bay coastline. At greatest risk are the Bay's more than 30 harbors, coves and river mouths which receive the bulk of the nutrient load from the watershed. **Widespread Problem:** Nutrient overloading, or eutrophication, is the greatest long-term threat to the Bay ecosystem. The difficulty with managing nitrogen loading is its widespread distribution from a wide array of sources all of these sources are rooted in the watershed's ever-growing population which has more than doubled this century alone to now include 370,000 people. **Citizen Volunteers:** Involving citizen volunteers allows the Coalition to achieve the ambitions goal of monitoring all of the Bay's major embayments – an area covering more than ¼ of the Massachusetts coast. The program has the dual benefit of collecting comprehensive water quality data while education and empowering people. This encourages citizens to get involved with management and restoration of the Bay's resources at the local level, and also provide water quality data to both the Local and State Environmental Managers.